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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,025	11/20/2003	Tomohiro Oshiyama	KOT-0085	8793
23413 7590 06/30/2008 CANTOR COLBURN, LLP 20 Church Street 22nd Floor Hartford, CT 06103			EXAMINER THOMPSON, CAMIE S	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 06/30/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/718,025

**Applicant(s)**

OSHIYAMA ET AL.

**Examiner**

Camie S. Thompson

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed April 4, 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 and 43-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-35 and 43-48 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 49-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Applicant's amendment and accompanying remarks filed April 4, 2008 are acknowledged.
2. Examiner acknowledges amended claims 1 and 8.
3. The rejection of claims 1 and 5-14 under 35 U.S.C. 102(e) as being anticipated by Iwakuma et al., U.S. Pre Grant Publication 2004/0086745 is overcome by applicant's amendment.
4. The rejection of claims 15-21 under 35 U.S.C. 102(e) as being anticipated by Sato et al., U.S. Patent Number 6,893,743 is withdrawn due to applicant's argument.
5. Examiner regrets the premature indication of allowable subject matter for claims 49-51.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

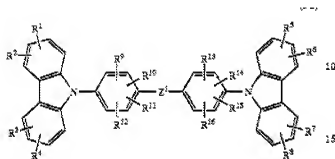
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-7 and 49-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al., U.S. Patent Number 6,893,743.

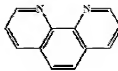
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Sato discloses an organic electroluminescent device comprising a light-emitting layer sandwiched between an anode and a cathode (see column 4, lines 26-45). The reference discloses that the light-emitting layer comprises a host material



wherein  $Z^1$  can be a divalent aromatic

hydrocarbon ring or aromatic heterocyclic group (representing  $-Xa-$  from the present claims) and  $R^1$  to  $R^{16}$  can be hydrogen as per instant claim 1 (see column 7, line 1-column 8, line 20). It is disclosed in column 8, lines 20-23 that  $Z^1$  can be a linking group which may have a substituent in present claim 1. Column 4, lines 26-43 of the reference disclose that the light-emitting layer also comprises a phosphorescent material represented by an organic metal complex wherein the metal can be osmium, platinum or iridium as per instant claims 6-7 (see also column 50, lines 1-10). Additionally, the reference discloses a hole-blocking layer sandwiched between the light emitting layer and the cathode (see column 77, lines 31-40) wherein the hole-blocking layer can



comprise a phenanthroline compound with a structure

8. Claims 8-35 and 43-48 are allowed. The prior art does not provide the recited organic electroluminescent device comprising the compounds as recited in claims 8-35 and 43-48.

***Response to Arguments***

9. Applicant's arguments filed April 4, 2008 have been fully considered but they are not persuasive. Applicant has amended claim 1 to remove formula (n) for -Xa\_. However, claim 1 recites that -Xa- represents a divalent 6- or 7-membered monocyclic heterocyclic ring which is alkyl substituted or a divalent 7-membered monocyclic ring which is unsubstituted. Sato discloses that Z<sub>1</sub> (-Xa\_ for the present claims) can be a divalent aromatic hydrocarbon ring or aromatic heterocyclic group, which encompasses the requirements for -Xa- of the present claims. The rejection is maintained. Examiner prematurely indicated allowable subject matter for claims 49-51. This office action is non-final.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached at (571) 272-1478. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Bruce H Hess/

Primary Examiner, Art Unit 1794